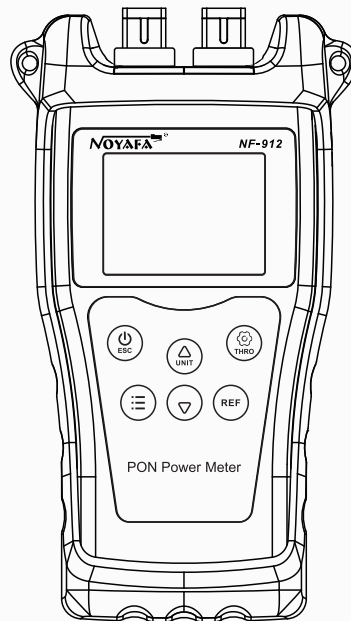


NF-912 PON Optical Power Meter

User Manual





Please read before using or repairing this equipment
And understand the safety considerations.

Thank you for buying NOYafa handheld
laser rangefinder series products!

Safety regulations

Please read the safety regulations and operation instructions carefully before using the instrument for the first time.

- Do not turn on or repair the instrument by yourself in any way, and illegal modification or modification is strictly prohibited. To change the performance of the laser transmitter of the instrument, please take good care of the instrument and do not place it in a place accessible to children. It is strictly forbidden to illuminate your own or other people's eyes and other parts of the body with an instrument laser, and it is strictly forbidden to illuminate the laser on the surface of a highly reflective object.

- The electromagnetic radiation of the instrument may cause interference to other equipment and devices, please do not use this instrument near aircraft or medical equipment, do not use the instrument in flammable and explosive environment. There are any quality problems with the instrument. Or if you have any questions about the use of the instrument, please contact the local dealer or instrument manufacturer in time, and we will solve it for you as soon as possible.

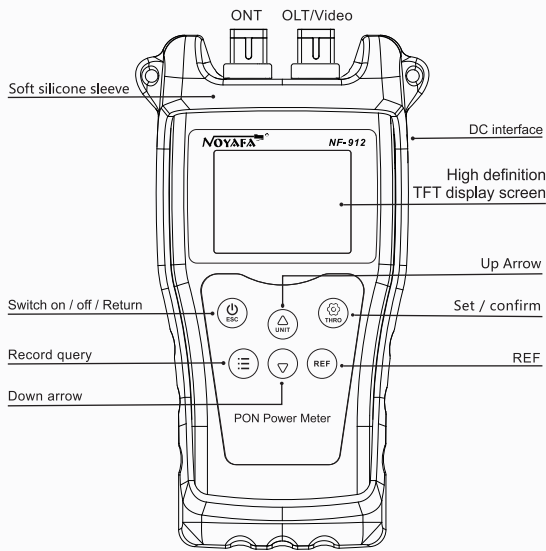
- Please dispose of the discarded instruments in accordance with the laws of your place.

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I. Overview

The NF-912 PON optical power meter is designed through a specially designed optical path and electricity-Path structure to realize the special requirements of signal optical power measurement in PON system. In other words, it is necessary to meet the simultaneous test and on-line measurement of three kinds of optical signal wavelengths on the line. The burst test function of testing and 1310nm signals, Thus it is convenient to install, manage and maintain the PON system.



NF-912

2. Method of use

01) Switch: press  for about 2 seconds to switch on and off manually



02) Unit switching: short press  to switch optical power units in the measurement interface, which can be switched to dBm, dB, xW

08:32	Testing	
ONT:1310nm	LOW	
ONT:1490nm	LOW	
ONT:1550nm	LOW	

03) Record saving: press  to save the record in the measurement interface

08:32	save ok !	
ONT:1310nm	LOW	
ONT:1490nm	LOW	
ONT:1550nm	LOW	

04) Record view: press  in the measurement interface to enter the record view interface

08:32	RECORD	
NO-1/1		
2021/01/06 08:00:44		
ONT:1310nm	LOW	
ONT:1490nm	LOW	
ONT:1550nm	LOW	

05) Record deletion: press  to delete all records in the record interface

08:32	RECORD	
NO-1/1		
2021/01/06 08:00:44		
ONT:1310nm		
ONT:1490nm	sure delete ?	
ONT:1550nm	LOW	

06) View REF: in the measurement interface, press  to enter the REF view interface

08:32	Testing	
REF		
ONT:1310nm	0.00dBm	
ONT:1490nm	0.00dBm	
ONT:1550nm	-44.23dBm	

07) Save REF: in the measurement interface long press  the REF value

08:32	PEF load err!	
REF		
ONT:1310nm	0.00dBm	
ONT:1490nm	0.00dBm	
ONT:1550nm	-44.23dBm	

08) System language: select "system language" in the settings menu interface and press 

08:32	Setting	
Lang:English		
Data-Time		
Auto-off: 30 min		
BI-Level: level 4		
BI-Time:off		
Threshold		
offset		
System		

09) System time: select "date time" in the setting menu interface and press  to select the year, month, day and hour. Then press  or  to adjust the value.

08:32	Data-Time	
2021/01/08 08:32		

10) Automatic shutdown: in the settings menu interface, select "automatic shutdown" short press , you can select "off, 15 minutes, 30 minutes, 1 hour, 2 hours"

08:32	Setting	
Lang:English		
Data-Time		
Auto-off: 30 min		
BI-Level: level 4		
BI-Time:off		
Threshold		
offset		
System		

11) Backlight brightness: select "backlight brightness" short press  in the setting menu interface, select brightness gear: 1, 2, 3, 4

08:32	Setting	
Lang:English		
Data-Time		
Auto-off: 30 min		
BI-Level: level 4		
BI-Time:off		
Threshold		
offset		
System		

12) Backlight delay: select backlight delay in the setting menu interface by pressing  for a short time. You can choose "close, 15 seconds, 30 seconds, one minute."

08:32	Setting	
Lang:English		
Data-Time		
Auto-off: 30 min		
BI-Level: level 4		
BI-Time:off		
Threshold		
offset		
System		

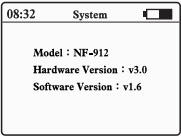
13) Threshold setting: select "threshold" setting short press  to enter, long press  to select different adjustment ratio, first short press  or  to select different objects, then short press  to confirm the selection, you can see that the underline is displayed in red, then press  or  to adjust the value, and then press  to save the exit value after adjusting the value, at this time the underline is displayed as a cyan opening and closing valve, and the valve function is turned on or off by pressing  for a long time in the measuring interface

08:32	Threshold	
0.0		
(Unit : dBm) Over Warn Fail		
ONT:1310nm	3.0	-1.0 -5.0
ONT:1310nm	-4.0	-20.0 -24.0
ONT:1310nm	-4.0	-20.0 -24.0

14) Offset settings: select backlight delay in the settings menu interface by pressing  to enter, select, and adjust values by  or 

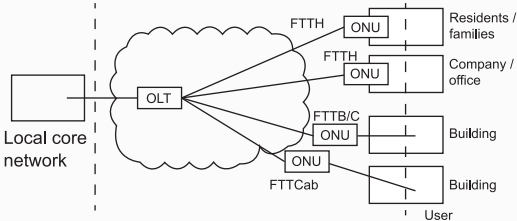
08:32	Offset	
ONT:1310nm	0.4	
Olt:1490nm	0.0	
VDO:1550nm	0.0	

15) System information: select system Information on the setup menu interface and press  to enter

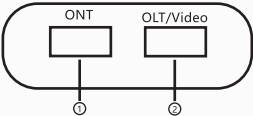


3.Scope of application

At present, FTTx/PON (fiber to home, fiber to building, fiber to resident, etc.) network construction is becoming a hot spot in the construction of global access network. The power meter is suitable for measuring optical fiber-to-home network. The specific measurement power meter outputs three kinds of wavelength laser (1310nm 1490nm 1550nm) from a single port, in which 1330nm measures the uplink transmission direction, 1490 and 1550 can measure the downlink direction test.



Broadband optical access network



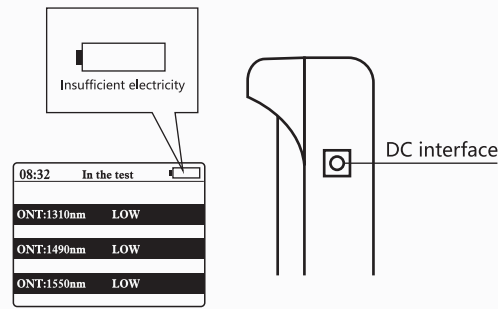
- 1.ONT Uplink signal probe (1310nm)
- 2.OLT/Video Downlink signal probe (1490/1550nm)

4.Detailed parameters

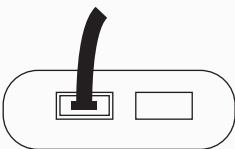
Type	NF-912		
Calibration wavelength	1310 Uplink test	1490 Downlink Test	1550 Downlink Test
Passband (nm)	1260~ 1360	1480~1500	1535~ 1570
Detection range (dBm)	-35~+10	-50~+10	-50~+10
Isolation 1310nm (dB)	-	> 40	> 40
Isolation 1490nm (dB)	> 40	-	> 40
Isolation 1550nm (dB)	> 40	> 40	-
Precision (dB)	±0.5		
Linearity	±2%		
Fiber optic adapter	Optical fiber SC interface		
Detector type	Yes		
Battery type	3.7V/1440mAH lithium battery		
Battery life (H)	>50		
Use temperature	-10%~+50°C, <90%RH		
Storage temperature	-20%~+60°C, <90%RH		
Product size (mm)	182*105*50		

5.Battery charging

When the power icon in the upper right corner of the host screen appears low power or does not boot properly, it is usually caused by insufficient battery voltage and needs to be plugged in a power adapter to charge the battery.



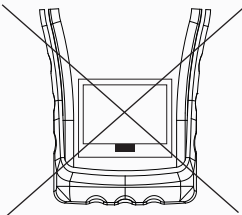
6.Matters needing attention



1.Do not push too hard in the operation of optical fiber SC interface, insert or unplug the interface into or out of the SC single flange of the main engine, should plug and pull smoothly



2.After the instrument test, please turn it off in time so as not to affect the battery life



3.Do not open the rear cover of the main engine on your own, need to be repaired or calibrated on time, please send it back to the production plant or agent.

7.List of products

1. Instruction manual 1
2. Product inspection certificate 1
3. product warranty card 1
4. instrument set 1
5. charging line 1